

KALLSTROEMIA IN THE MIDDLE ATLANTIC STATES

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In the course of preparing my monograph of *Kallstroemia*, (Porter, 1969), I saw no collections of the genus from eastern North America from the area east of Illinois and Mississippi and north of South Carolina. Since the manuscript went to press, however, two reports of "*Kallstroemia intermedia* Rydb." have been encountered, one from Maryland (Reed, 1964), and one from Pennsylvania (Wherry, 1968). This name is a synonym of *K. parviflora* Norton.

Through the kindness of Dr. John M. Fogg, Jr., University of Pennsylvania, and Dr. Clyde F. Reed, Baltimore, I was able to examine the specimens cited in these reports. The collection from Maryland [Baltimore Co.: Canton, chrome ore piles, 27 Sept 1953, *Reed* 32745 (Reed Herb.)] proves to be *Kallstroemia parviflora*, while that from Pennsylvania [Delaware Co.: Chester, wharves & railroad sidings, American Dyewood Co., 5 Oct 1932, *Fogg* 5312 (PENN)] is *K. maxima* (L.) Hook. & Arn.

Kallstroemia maxima is a Caribbean species, hitherto known from Colombia and Venezuela northward through Central America, Mexico, and the West Indies to Texas, Florida, Georgia, and South Carolina. *Kallstroemia parviflora*, on the other hand, is a species of central North America, occurring from the Mexican states of Guanajuato, Querétaro, and Hidalgo northward to Colorado, Kansas, Missouri, and Illinois, and from California eastward to Mississippi. Most members of the genus are weedy, and *K. maxima* and *K. parviflora* are commonly encountered in disturbed habitats, both natural and man-made. Also, both species have expanded their natural ranges in historic times. *Kallstroemia maxima* appears to have arrived in the United States via ship's ballast, and the extension of railroads and highways has aided in the spread of *K. parvi-*

flora in North America. Ships or airplanes have also played a role in the dispersal of the latter species, conveying it to South America, where it has become a weed in western and central Peru.

It is doubtful if either of these annual species can form persistent populations in the Middle Atlantic States. The winters there should be too severe for survival of their seeds. However, new localities in this area are to be sought, especially along highways and railroads, and on ore and ballast dumps. Weeds of warmer climes are continually being introduced into temperate North America, although few persist to become true members of the flora.

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